

Visual Mathematics in Practice



Name of the teacher:	JASNA MARKOVIĆ
Name and address of the school:	GIMNAZIJA LAZAREVAC, ul. Dostejeva 4, 11550 Lazarevac
Theme of the lesson:	Isometric transformation
Place in curriculum: (type of school, grade)	High school – I grade - department of mathematics
Age of the students/pupils:	16 years old
Title of the lesson:	Isometries – connections between mathematics and the arts

Description of the lesson			
Time	Exercises, matters, parts of the lesson	Methods and forms of student activities	Developable competencies
10 min	<i>The inspiration for this lesson came from lectures of Jablan Slavik and Liljana Radovic at the Summer School.</i> <i>The teacher showed examples of images (Esher, J.Slavik and Lj.Radovic) where you can observe a variety of symmetry and transformation. Each group chose what to paint.</i>	<i>Students are divided into heterogeneous groups.</i>	<i>Developing communication, colaboration, practical skills.</i>
70 min	<i>Making schemes - using isometric drawings.</i> <i>Coloring drawings using various techniques.</i>	<i>Students draw schemes using: axial, central symmetry, rotation and translation.</i> <i>Drawings colored markers, colored pencils, watercolor.</i> <i>One group depicts a wall in the school hall.</i>	<i>Thinking, creativity, originality, spatial seeing, image creating skills.</i> <i>Developing ability of connecting abstrac and real fact, generalisation of mathematical facts</i>

10 min	<i>Exhibition of works</i>		
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Summary

*I hope that students will finally find artistic beauty of mathematics !
I announced to students this class and they were looking forward to this way of working.
They were asked for more of these classes.
I was pleased with the students' positive reactions.*

Supplements

Used materials: *Projector, computer , wall paint , scissors, papers, sticks, colored markers, colored pencils, watercolor,*

Photos: *The working atmosphere*



The wall before our workshop

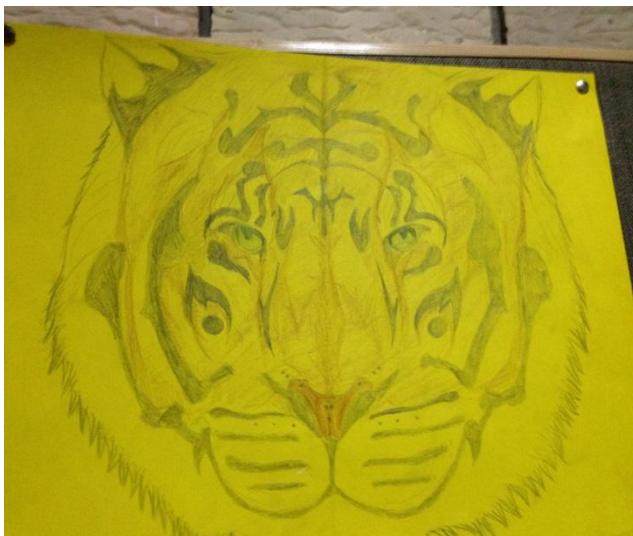
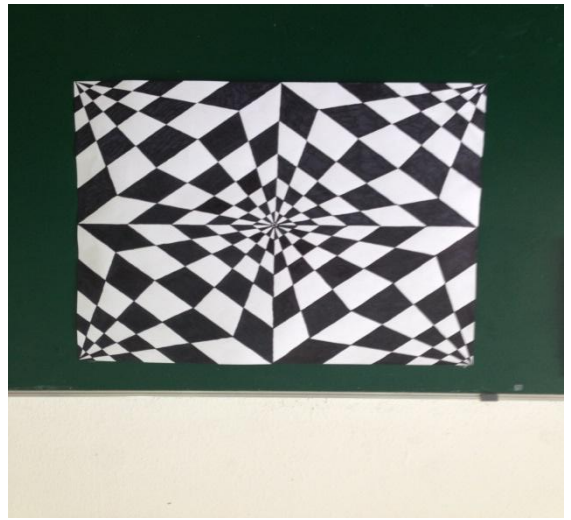


during working



The results were:





Our wall drawing is done !

